



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/626,026	07/27/2000	Ashok Sengupta	54942USA4A.002	9991

32692 7590 07/21/2003

3M INNOVATIVE PROPERTIES COMPANY  
PO BOX 33427  
ST. PAUL, MN 55133-3427

EXAMINER

LEVY, NEIL S

ART UNIT	PAPER NUMBER
----------	--------------

1616

DATE MAILED: 07/21/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	626026	Applicant(s)	SENG-YPTA et al
Examiner	MAiley	Group Art Unit	1616 18

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 4/18/03
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1, 12/18, 41-48 is/are pending in the application.
- Of the above claim(s) 48 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 12/18, 41-47 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1616

Newly submitted claim 48 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the invention now claimed, algicidal, has not been presented or examined, and requires a new search as a patentably distinct and independent invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 48 stands withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al '98.

The rejection of record is maintained.

See p.179-an end group of antimicrobial quaternary ammonium compound, on a polyurethane polymer made of poly iso cyanates and polyactive H compounds. At least partial endcapping of the polymer is shown.

Claims 1, 41-45 are rejected under 35 U.S.C. 102(b) as being anticipated by storicfk-5084096.

The rejection of record is maintained.

Art Unit: 1616

Claims 1, 17, 18, 41-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klesse et al 6194530 in view of Stovick and further in view of Imazato et al 5408022 and Green et al 3931319.

The rejection of record is maintained.

The instant composition, capable of forming a self-supporting film, (basis for capability, how formed, thickness and meaning of film, self supporting not further defined of the instant) of end capped polyurethanes, not further defined, as to ~~no~~ weight average molecular weight, are obvious to one of ordinary skill in the antimicrobial coating arts. All of the references are in this art-and treat of coating the instant substrates ~~in~~ medic and hygiene articles, cloth, fibers, exterior surfaces to provide self supporting films, such as the painted surfaces and articles of Klesse (col.9, last paragraph), the metal concrete exterior of Stovick (claims) the medical articles of Imazato (col.7, top) and general use of quaternary end capping of Green.

As to Klesse, (b) of col.2 teaches repeated urethane groups-polyurethane, to stretch the unotherwise limited instant polymers to which are attached vinyl linking and quaternary pendant groups, which would, to some degree constitute end groups during polymerization. Stovick carrier the process further, the polymer, elucidating polymers of polyurethane, the side chain considered as a capped termination-the polymer thus partially end capped, as of instant claim 1.

Imazato likewise show treatment of polyurethane, as instantly claimed, with quaternary attachable end groups, and Green suggests any polymer can be end capped with quaternary microbiocidal groups.

Art Unit: 1616

Applicant's arguments filed 4/18/03 have been fully considered but they are not persuasive. Applicant's arguments the active H includes polyol, and polyurethane is defined as such (p.4) is persuasive; this 112 1<sup>st</sup> ¶ rejection is withdrawn, the 102 rejections are maintained, over Wang, which does shows a polyurethane with branches, within the instant claim language, capped; and stovicek, also within language addressed to the instant polyurethane end capped. The obviousness rejection is in accord with the instant claim language, as discussed in the continued rejections, continues. Applicants' arguments to the point that each of the references fail to identify the instant claimed features, and absent a showing to combine, is not persuasive. There is no preclusion of one in the art to utilize the subject matter of the cited references and provide a polyurethane, among other polymeric options shown, with at least partial end capping with Green's showing that polymers' end capped with quaternary groups are biocidal.

~~As the instant application is not a continuation of a previously filed application, it must be complete and~~

~~include a definition of the invention to be examined even though the requirement~~

~~is waived (37 CFR 1.143).~~

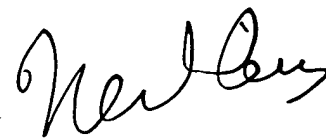
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil Levy whose telephone number is 308-2412. The examiner can normally be reached on Tuesday- Friday 7:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 308-4556 for regular communications and 872-9307 for After Final communications.

Art Unit: 1616

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1235.

Levy/tgd  
July 3, 2003



NEIL S. LEVY  
PRIMARY EXAMINER